

1102 Fieldcrest Drive
Austin, TX 78704
(512) 585-8592
Sascha@adaptationinternational.com
www.adaptationinternational.com

Nancy Beller-Simms, Ph.D. Program Manager, Sectoral Applications Research Program (SARP) NOAA Climate Program Office E-mail: nancy.beller-simms@noaa.gov

May 1, 2015

Dear Nancy.

The first six months of our grant: *Using critical thresholds to customize climate projections of extreme events to user needs and support decisions* (Award number: NA140AR4310248) have been successful in starting the work with the first two communities and laying the foundation for the rest of the project. A brief summary of the highlights of our progress on the grant are included below along with a few observations from the project team. Please do not hesitate to contact me if I can answer any specific questions or provide more information.

The project team – Adaptation International, the Institute for Social and Environmental Transition (ISET), Atmos Research, and two of NOAA RISA teams – the Southern Climate Impacts Planning Program (SCIPP) and the Climate Impacts of the Southwest (CLIMAS) have been working very well together on the project and using a collaborative approach to design surveys, conduct workshops, and move the project forward.

City of Boulder, Colorado

- Project team members designed, distributed, and analyzed an initial survey to gauge awareness and action of workshop participants on climate change across city departments and community organizations.
- Conducted first Shared Learning Dialogue Workshop 14 attendees, aside from the project team, on December 9th, 2014.
- The attendees discussed potential key climate vulnerabilities and extreme weather thresholds.
- ISET followed up with attendees in a series of meeting to help them identify and select critical thresholds for detailed climate change modeling and analysis.
- Key focus for the extreme weather thresholds is on items such as: weather
 patterns conducive to wildfire, multi-year drought, changes to the 1% flood
 event, identification of new 1% flood events, emergence of extreme heat
 events.

City of Miami, Oklahoma

- Project team members designed, distributed, and analyzed an initial survey to gauge awareness and action of workshop participants on climate change across city departments and community organizations.
- Conducted first shared learning dialogue workshop had 22 attendees not including the project team on January 29th, 2015.
- The project team has begun to follow-up and work with different city departments on identifying the key weather events that have affected Miami in the past. Have not yet identified the specific weather conditions that have caused those events or the thresholds associated with those conditions.
- Key focus for the City is on: surface flooding, extreme wind, ice storms, and the potential for extreme heat events.

Observations from the Project Team

- Somewhat surprisingly, it has proven more difficult than expected to identify
 the critical extreme weather thresholds for the communities. Even in
 Boulder, it took many meeting beyond the initial workshop to finalize the list
 of thresholds that the stakeholders agreed: were important, could be
 modeled or analyzed using climate projections, and would provide useful
 information.
- The majority of the attendees at the City of Miami workshop were very comfortable identifying the impacts of extreme weather events on the city, but are not easily able to identify the weather events that cause those impacts.
- The project team has added in the step of asking the stakeholder to identify the dates of the major weather related events and will then review the historic weather observations in order to hopefully identify the key weather conditions that lead to those events.

Next Steps

- Analyze the downscaled climate model projection to determine potential changes in the frequency, timing, or magnitude of the extreme weather thresholds selected by Boulder, CO.
- Complete inventory of major weather related events in Miami, OK and analyze the historical data for weather conditions around those events.
- Begin identifying and selecting two communities to join the project in October.

